Textbook Alignment to the Utah Core – Math 7

*This alignment has been completed using an "Independent Alignment Vendor" from the USOE approved list (**www.schools.utah.gov/curr/imc/indvendor.html**.)   Yes _____   No _____*

Name of Company and Individual Conducting Alignment: McHugh and Associates

A "Credential Sheet" has been completed on the above company/evaluator and is (Please check one of the following):

☐ **On record with the USOE.**

☐ **The "Credential Sheet" is attached to this alignment.**

Instructional Materials Evaluation Criteria (name and grade of the core document used to align): Math 7 Core Curriculum

Title: Math Intervention, Book 2 ©2008   **ISBN#: SE:** 978-0-618-90047-3 / **TE:** 978-0-618-90519-5

Publisher: McDougal Littell

Overall percentage of coverage in the *Student Edition (SE) and Teacher Edition (TE)* of the Utah State Core Curriculum: 11 %

Overall percentage of coverage in *ancillary material*s of the Utah Core Curriculum: N/A %

STANDARD I: **Students will expand number sense to understand, perform operations and solve problems with rational numbers.**

Percentage of coverage in the *student and teacher edition* for Standard I: 53 %	**Percentage of coverage not in student or teacher edition, but covered in the *ancillary material* for Standard I: N/A %**		
OBJECTIVES & INDICATORS	**Coverage in *Student Edition (SE)* and *Teacher Edition (TE)* (pg #'s, etc.)**	***Coverage in Ancillary Material* (titles, pg #'s, etc.)**	*Not covered in TE, SE or ancillaries*
Objective 1.1: Represent rational numbers in a variety of ways.			
a. Demonstrate multiple ways to represent whole numbers, decimals, fractions, percents, and integers using models and real-life examples.	**SE:** 17, 18 (#16-27), 19 (#29, 32), 21 (Example 3, Try This 5), 22 (#13-16), 23 (#17, 21), 24-25, 26 (#9-10, 23-25), 27 (#26, 30), 29 (Example 2), 30 (#10-12), 31 (#28, 32), 33 (Example 3, Try This 5), 34 (#17-22), 35 (#25, 28), 40 (#6-11), 77 (#34) **TE:** 17 (#13-14, 23-24), 117-119, 123		
b. Simplify numerical expressions with whole number exponents using order of operations, and recognize that any positive number to the 0 power is 1.	**SE/TE:** *Not addressed in this text*		
c. Represent numbers greater than one using scientific notation.	**SE/TE:** *Not addressed in this text*		
d. Select the most appropriate form of a rational number for a given context.	**SE/TE:** *Not addressed in this text*		

Objective 1.2: Compare and order rational numbers, including positive and negative fractions, positive and negative mixed numbers and positive and negative decimals.				
a.	Identify, read and locate rational numbers on a number line.	**SE/TE:** *Not addressed in this text*		
b.	Compare pairs of rational numbers in different forms.	**SE:** 29 (Example 2), 30 (#10-18), 36, 37 (Example 3, Try This 3-4), 38 (#1-15), 39 (#22, 24, 26), 41 (#19, 28-35, 37), 83, 84 (#4-21), 85 (#22, 24), 94 (#12-17), 95 (#18, 35) **TE:** 2 (#14, 20), 17 (#21, 29), 19 (#55), 118-119, 123-124		
c.	Order rational numbers with and without a number line.	**SE:** 29 (Example 3, Try This 5-6), 30 (#19-27), 31 (#29), 37 (Example 4, Try This 5-6), 38 (#16-21), 39 (#23), 40 (#16-18), 41 (#36), 82, 84 (#1-3), 85 (#23, 26), 94 (#10-11) **TE:** 2 (#15), 17 (#22, 28), 118-119, 123-124		

Objective 1.3: Explain relationships and equivalences among rational numbers.				
a.	Find equivalent forms for common fractions, decimals, percents and ratios, including repeating or terminating decimals.	**SE:** 20-23, 24-27, 32-35, 41 (#20-47), 86-89, 90-93, 95 (#19-34) **TE:** 2 (#13, 21), 17 (#15-20), 18 (#56-57), 117-119, 123-124		
b.	Predict the effect of operating with fractions, decimals, percents and integers as an increase or a decrease of the original value.	**SE/TE:** *Not addressed in this text*		
c.	Recognize and use the identity properties of addition and multiplication, the multiplicative property of zero, the commutative and associative properties of addition and multiplication and the distributive property of multiplication over addition.	**SE/TE:** *Not addressed in this text*		
d.	Recognize and use the inverse operations of adding and subtracting a fixed number, multiplying and dividing by a fixed number and computing squares of whole numbers and taking square roots of perfect squares.	**SE/TE:** *Not addressed in this text*		

	Objective 1.4: Model meanings of ratios and operations with rational numbers.			
a.	Demonstrate that the fraction *a over b* represents *a divided by b*.	**SE:** 32, 34 (#1-8), 35 (#24), 41 (#24-27) **TE:** 17 (#25-27), 118-119		
b.	Recognize percents as ratios based on 100 and decimals as ratios based on powers of 10.	**SE/TE:** *Not addressed in this text*		
c.	Extend the multiplication of whole numbers to multiplication of fractions using area models, measurement models and the number line.	**SE:** 56, 58 (#1-6), 59 (#29), 63 (#27) **TE:** 18 (#44), 121-122		
d.	Compare the division of whole numbers to the division of fractions using area or set models, the number line, and missing factors.	**SE/TE:** *Not addressed in this text*		

	Objective 1.5: Solve problems involving rational numbers.			
a.	Compute fluently using all four operations with integers and positive fractions and decimals.	**SE:** 42-43, 44-47, 48-51, 52-55, 56-59, 60-63, 64-67, 68-71, 72-73, 96-99, 100-103, 104-105, 106-109, 110-113, 114-117, 122-125, 126 (#6-19), 127 (#20-28, 37-38) **TE:** 2 (#16-18, 22), 3 (#23-24), 18, 19 (#50-52, 58-67), 20-21, 93-94, 95, 119-127		
b.	Solve problems using factors, multiples, prime factorization, relatively prime numbers and common divisibility rules.	**SE:** 2-5, 6-9, 10-13, 14-15, 24-27, 28-31 **TE:** 1 (#10-11), 2 (#12), 16 (#8-12), 115-118		
c.	Solve application problems involving rational numbers.	**SE:** 5 (#45-47), 9 (#13-15), 13 (#15-17), 15 (#19, 32-33), 27 (#26-28, 31), 31 (#28-30), 39 (#22, 24), 41 (#19, 36-37), 47 (#30-31), 51 (#21-23), 55 (#22-24), 59 (#25-27), 63 (#25-27), 67 (#29-31), 68-69, 71, 73 (#22, 39-40), 85 (#22, 24), 95 (#18, 35-36), 99 (#26-28), 103 (#30-32), 109 (#28-30), 113 (#30-32), 117 (#29-31), 121 (#24-26), 122-123, 124 (#6), 125, 127 (#20, 37-38) **TE:** 2 (#17, 20), 3 (#23-24), 20-21, 115-127		
d.	Determine if an answer is reasonable using estimation.	**SE:** 118-121, 127 (#29-36) **TE:** 20 (#70), 126-127		

STANDARD II: Students will use proportional reasoning to solve problems.			
Percentage of coverage in the *student and teacher edition* for Standard II: 0 %	**Percentage of coverage not in student or teacher edition, but covered in the *ancillary material* for Standard II: N/A %**		
OBJECTIVES & INDICATORS	**Coverage in *Student Edition (SE) and Teacher Edition (TE)* (pg #'s, etc.)**	***Coverage in Ancillary Material* (titles, pg #'s, etc.)**	***Not covered in TE, SE or ancillaries***
Objective 2.1: Solve problems involving ratios, rates, proportions and percentages.			
a. Solve ratio and rate problems using informal methods involving multiplication and division.	**SE/TE:** *Not addressed in this text*		
b. Solve percent problems using ratio and proportion, including problems involving discounts, interest, taxes, tips, and percent increase or decrease.	**SE/TE:** *Not addressed in this text*		
c. Solve problems involving proportions, rates, and measures.	**SE/TE:** *Not addressed in this text*		
Objective 2.2: Apply the properties of proportionality to different units of measurement.			
a. Convert from one unit of measurement to an equivalent unit of measurement in the same system using a given conversion factor.	**SE/TE:** *Not addressed in this text*		
b. Understand that in a proportional relationship, all dimensions change by the same scale factor.	**SE/TE:** *Not addressed in this text*		
c. Create and interpret scale drawings and approximate distance on maps using proportions.	**SE/TE:** *Not addressed in this text*		

STANDARD III: Students will develop fluency with the language and operations of algebra to analyze and represent relationships.

Percentage of coverage in the *student and teacher edition* for Standard III: **0 %**	Percentage of coverage not in student or teacher edition, but covered in the *ancillary material* for Standard III: **N/A %**		
OBJECTIVES & INDICATORS	**Coverage in *Student Edition (SE) and Teacher Edition (TE)* (pg #'s, etc.)**	*Coverage in Ancillary Material* (titles, pg #'s, etc.)	*Not covered in TE, SE or ancillaries*
Objective 3.1: Evaluate, simplify and solve algebraic expressions and equations.			
a. Write a variable expression to identify pattern relationships, and use those expressions to make predictions.	**SE/TE:** *Not addressed in this text*		
b. Translate verbal expressions into algebraic expressions.	**SE/TE:** *Not addressed in this text*		
c. Simplify and evaluate algebraic expressions.	**SE/TE:** *Not addressed in this text*		
d. Show that performing the same operation on both sides of an equation will produce an equivalent equation.	**SE/TE:** *Not addressed in this text*		
e. Solve single-variable linear equations and inequalities of The form $ax + b = c$, $ax + b < c$, or $ax + b > c$.	**SE/TE:** *Not addressed in this text*		
Objective 3.2: Represent relationships using graphs, tables, and other models.			
a. Identify integer coordinates when given the graph of a point on a rectangular coordinate system.	**SE/TE:** *Not addressed in this text*		
b. Graph ordered pairs of integers on a rectangular coordinate system.	**SE/TE:** *Not addressed in this text*		
c. Model real-world problems using graphs, tables, equations, manipulatives and pictures.	**SE/TE:** *Not addressed in this text*		

STANDARD **IV: Students will use algebraic, spatial, and logical reasoning to solve geometry and measurement problems.**

Percentage of coverage in the *student and teacher edition* for Standard IV: <u>0 %</u>		Percentage of coverage not in student or teacher edition, but covered in the *ancillary material* for Standard IV: <u>N/A %</u>	
OBJECTIVES & INDICATORS	Coverage in *Student Edition (SE) and Teacher Edition (TE)* (pg #'s, etc.)	*Coverage in Ancillary Material* (titles, pg #'s, etc.)	*Not covered in TE, SE or ancillaries*
Objective 4.1: Draw, label and describe attributes of geometric figures to determine geometric relationships.			
a. Draw, label and describe relationships among line segments, rays, lines, parallel lines and perpendicular lines, including midpoint of a line segment.	**SE/TE:** *Not addressed in this text*		
b. Draw, label and describe relationships among vertical, adjacent, complementary and supplementary angles.	**SE/TE:** *Not addressed in this text*		
c. Draw, label, and describe attributes of angles, triangles and quadrilaterals.	**SE/TE:** *Not addressed in this text*		
Objective 4.2: Determine measurements in metric and customary units using appropriate tools and formulas.			
a. Estimate metric and customary measures using everyday objects and comparisons.	**SE/TE:** *Not addressed in this text*		
b. Measure length, area, volume, and angles to appropriate levels of precision.	**SE/TE:** *Not addressed in this text*		
c. Calculate the measurement of everyday objects using formulas for perimeters and areas of triangles and quadrilaterals, and circumferences and areas of circles	**SE/TE:** *Not addressed in this text*		
d. Calculate the measurement of everyday objects using formulas for surface area and volume of right triangular and rectangular prisms and cylinders.	**SE/TE:** *Not addressed in this text*		

<table>
<tr><td colspan="4">STANDARD V: Students will understand concepts from probability and statistics and apply statistical methods to solve problems.</td></tr>
<tr><td colspan="2">Percentage of coverage in the student and teacher edition for Standard V: <u>0 %</u></td><td colspan="2">Percentage of coverage not in student or teacher edition, but covered in the ancillary material for Standard V: <u>N/A %</u></td></tr>
<tr><td colspan="2">OBJECTIVES & INDICATORS</td><td>Coverage in Student Edition (SE) and Teacher Edition (TE) (pg #'s, etc.)</td><td>Coverage in Ancillary Material (titles, pg #'s, etc.)</td><td>Not covered in TE, SE or ancillaries</td></tr>
<tr><td colspan="2">Objective 5.1: Use basic concepts of probability to determine the likelihood of an event and compare the results of various experiments.</td><td></td><td></td><td></td></tr>
<tr><td>a.</td><td>Write the results of a probability experiment as a fraction, ratio, or decimal, between zero and one, or as a percent between zero and one hundred, inclusive.</td><td>SE/TE: Not addressed in this text</td><td></td><td></td></tr>
<tr><td>b.</td><td>Compare experimental results with theoretical probability.</td><td>SE/TE: Not addressed in this text</td><td></td><td></td></tr>
<tr><td>c.</td><td>Compare individual, small group, and large group results of a probability experiment.</td><td>SE/TE: Not addressed in this text</td><td></td><td></td></tr>
<tr><td colspan="2">Objective 5.2: Display and compare data to make predictions and formulate conclusions.</td><td></td><td></td><td></td></tr>
<tr><td>a.</td><td>Display data using tables, scatter plots and circle graphs.</td><td>SE/TE: Not addressed in this text</td><td></td><td></td></tr>
<tr><td>b.</td><td>Compare two similar sets of data on the same graph.</td><td>SE/TE: Not addressed in this text</td><td></td><td></td></tr>
<tr><td>c.</td><td>Compare two different kinds of graphs representing the same set of data.</td><td>SE/TE: Not addressed in this text</td><td></td><td></td></tr>
<tr><td>d.</td><td>Propose and justify inferences and predictions based on data.</td><td>SE/TE: Not addressed in this text</td><td></td><td></td></tr>
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